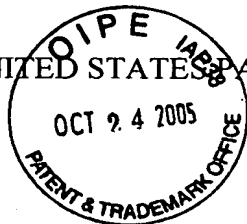


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of:

Volker HILARIUS et al.

Group Art Unit 1626

Serial No.: 09/866,926

Examiner: Anderson

Filed: May 30, 2001

For: IONIC LIQUIDS

**PETITION TO THE COMMISSIONER UNDER 37 CFR § 1.181, REQUESTING
WITHDRAWAL OF REQUIREMENT FOR RESTRICTION**

MAIL STOP FEE AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

SIR:

Relief Requested

This is a petition courteously submitted under 37 CFR § 1.181, requesting the Commissioner, through the Honorable Group Director, to instruct the Examiner to withdraw the Restriction Requirement.

Statement of Facts

On February 10, 2003, the Examiner issued an Office Action setting forth a Restriction Requirement. In the Restriction, the claims were grouped as follows: Group I, claims 1-10 and 15; Group II, claims 11 and 13-14; and Group III, claim 12. Group I was said to be drawn to an ionic liquid. Group II, was said to be drawn to an electrochemical cell and an electrolyte composition. Group III was said to be drawn to a supercapacitor. The groups of claims were said to be related as "mutually exclusive species in an intermediate-final product relationship." In addition to the Restriction Requirement, the Examiner also made an Election of Species Requirement.

On March 10, 2003, Applicants filed an Election and Amendment. In this paper, Applicants elected Group I as the elected invention and selected the compound 1-ethyl-3-methylimidazolium bis [1,2-benzenediolato-O,O'] borate as the elected species. The Restriction Requirement was traversed on grounds that the inventions were not related as intermediate-final

product but instead were related as subcombination - combination. Thereafter, the Examiner issued a further Office Action on April 21, 2003. In this Office Action, the Examiner again restated the Restriction. However, the Examiner agreed with Applicants' prior arguments that the groups were not related as intermediate-final product. Instead, the Examiner gave a new reasoning in support of the Restriction. Specifically, the Examiner stated the following:

“Inventions of group I and groups II and III are related as products and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in materially different process of using that product (MPEP §806.05(h)). In the instant case, the product of group I may be used in two materially different ways, one in an electrochemical cell and the other in a capacitor.”

In the Reply filed September 21, 2003, Applicants again traversed the Restriction Requirement. Applicants argued that the claims of Group I and the claims of Groups II and III are not related as product and process of use since none of claims 11-14 were process claims. In the Final Office Action of February 11, 2004, the Examiner responded to Applicants' argument as follows:

“The Examiner has not asserted that any of the claims are process of use claims per se, rather the indication is the relationship between groups I and II-III that render the groups distinct from one another. An electrochemical cell, the supercapacitor related to the ionic liquid as process of using the ionic liquid [sic]. ”

Applicants' response of 10 June 2004 again traversed the restriction. The Examiner responded in the Office Action of 7 January 2005 by making the restriction final and asserting another new reasoning in support of the Restriction. Specifically, at page 2 of the January 05 Office action the Examiner asserts that claims 11-14 are independent and distinct products. Applicants traversed this restriction in the response of 7 April 2005 by arguing that claims 11-14 recite all of the features of claim 1.

Despite the indication of allowable subject matter in the Office Action of January 7, 2005, the Examiner did not follow the procedure set forth in MPEP §803.2 and expand the

examination. Instead, the Examiner objected to the elected claims asserting that the claims contained non-elected subject matter. In the 24 June 2005 Office Action, the Examiner further argued that the election of a specific compound was a further restriction requirement. The Examiner argues "Section 121 provides the Commissioner of Patents and Trademarks with the authority to restrict applications to several claimed inventions when those inventions are found to be independent and distinct."

Points to be Reviewed

In particular, the issues for review are: (1) whether restriction of claims 11-14 from the claims of Group I is justified on the basis that claims 11-14 are independent and distinct products; (2) whether restriction within a single claim is permissible rather than proceeding with the examination procedure of section §803.02 following an election of species.

Arguments in Support of Petition

- (I) No basis for restricting claims 11-14 from the elected claims.

In the 24 June 2005 Office Action, the Examiner asserts that claims 11-14 are independent and distinct products from claims 1-10 and 15-21. Claims 11-14 are not independent from product Claim 1. They depend directly from Claim 1 and therefore require all the features of product Claim 1.

As Applicants' indicated in, for example, the Response of March 10, 2003, Group I and Group II and III (claims 11-14) are related as subcombination and combination. See MPEP §806.05(c). This type of relationship requires a two-way distinctness for restriction and such two-way distinctiveness has not been shown. Once the product claims of Group I are found to be allowable, the combination claims of Groups II and III will also necessarily be allowable. Thus, it is respectfully submitted that the Examiner's evolving arguments in support of the Restriction fail to establish any rationale as to why Applicants' claims are not in a subcombination-combination relationship, as per MPEP §806.05, and why restriction is satisfied under MPEP §806.05. Reversal of the restriction is respectfully requested.

Enclosed is a copy of a "Petition Decision" issued July 30, 2004 in co-pending and commonly assigned application Serial No. 09/877,259. In that case, a very similar restriction was made between claims 1-7 drawn to an ionic liquid and claims 8-11 drawn to a capacitor,

electronic cell, and an electrolyte composition. The restriction was premised on the same assertion as in the present application, i.e., the claims 8-11 were drawn to independent and distinct inventions. In the petition, the restriction was reversed because the claims were in combination/subcombination relationship, as is the present case.

(II) No basis for ignoring the procedure set forth in MPEP §803.02

At page 3, line 13 of the 24 June 05 Office Action, the Examiners' states that "the election of a specific compound was a further restriction requirement" and requests applicants' to cancel non-elected subject matter from the claims. In effect, the Examiner is asserting that, based on 35 USC §121, Applicants are not entitled to have claim 1 examined in a single examination. This is directly contrary to the rationale presented by the court in *In re Weber et al.*:

As a general proposition, an applicant has a right to have *each* claim examined on the merits. If an applicant submits a number of claims, it may well be that pursuant to a proper restriction requirement; those claims will be dispersed to a number of applications. Such action would not affect the right of the applicant eventually to have each of the claims examined in the form he considers to best define his invention. If, however, a single claim is required to be divided up and presented in several applications, that claim would never be considered on its merits.

It is apparent that §121 provides the Commissioner with the authority to promulgate rules designed to *restrict* an *application* to one of several claimed inventions when those inventions are found to be "independent and distinct." It does not, however, provide a basis for an examiner acting under the authority of the Commissioner to *reject* a particular claim on that same basis. [*Weber* at 331-332]

Although the Examiner has characterized her action as a Restriction, rather than a Rejection, the effect is the same. The Examiner is asserting that the authority given to the Commissioner under 35 USC §121 permits the Examiner to require that a single claim "be divided up and presented in several applications" and thus deny Applicants consideration of that single claim on its merits. This is exactly the action that the Court in *Weber* stated was not permitted under 35 USC §121. The Examiner's actions violate "the basic right of the Applicant to claim his invention as he chooses." [*Weber* at 332]

MPEP §803, entitled "Restriction - When Proper," states that "insofar as the criteria for restriction practice relating to Markush-type claims is concerned, the criteria are set forth in MPEP §803.02. MPEP at Section 803.02, states that, following election, the Markush-type claims will be examined fully with respect to the elected species *and further to the extent necessary to determine patentability*. The MPEP states that

"should no prior art be found that anticipates or renders obvious the elected species, the search of the Markush-type claim *will be extended*. If prior art is then found that anticipates or renders obvious the Markush-type claim with respect to a non-elected species, the Markush-type claims shall be rejected..." [Emphasis added.]

The Examiner has failed to explain why Applicants' claim 1, is not being examined pursuant to the instructions in MPEP §803.02, entitled "Restriction - Markush Claims."

The MPEP states that: 'since the decision in *In re Weber*, 580 F.2d 455, 198 USPQ 328 (CCPA 1978) and *In re Haas*, 580 F.2d 461, 198 USPQ 334 (CCPA 1978), it is improper for the Office to refuse to examine that which the Applicants regard as their invention, unless the subject matter in a claim lacks unity of invention.' Lack of unity is not present in this case, nor is it even alleged by the Examiner.

Applicants' compound is composed of two parts: A is an anion of relatively simple construction; variable K is comprised of various heterocyclic cations. However, it is noted that the art does not consider the grouping together of Applicants' cation K to be repugnant to scientific classification. For example, in claim 1 of Koch et al.(US 5,827,602) the cation of the ionic liquid can be a pyridinium ion, a pyridazinium ion, pyrimidinium ion, a pyrazinium ion, an imidazolium ion, a pyrazolium ion, a thiazolium ion, an oxazolium ion, or a triazolium ion. Thus, the cations of Koch et al. were examined together. Similarly, in Westman (US 6,565,130) claim 5 defines cation A⁺ as pyridinium, pyridazinium, pyrimidinium, pyrazinium, imidazolium, pyrazolium, thiazolium, oxazolium, isoxazolium, and triazolium ions. So, in Westman a broad scope of heterocyclic cations were also examined together. Thus, in this field of technology, it is clearly not repugnant to scientific classification to group the cations of Applicants' group K together, nor is it a burden to examine the full scope of Applicants' cations.

The proper procedure for examination of a Markush claim, as indicated in section 803.02, is that the examiner may require a provisional election of a single species. Following this election, the MPEP states that "the Markush-type claims will be examined

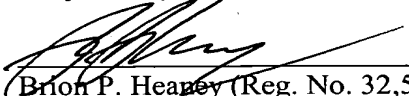
fully with respect to the elected species *and further to the extent necessary to determine patentability.*" [Emphasis added.]

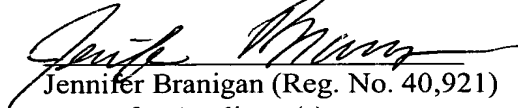
Thus, in the instant case, the Examiner has made a provisional election of a single species and examination should proceed according to section 803.02. No Restriction is necessary or warranted.

Relief Requested

For the forgoing reasons, Applicants request that the Examiner be directed to withdraw the Restriction Requirement set forth in the Office Action of 24 June 2005 and examine the claims of Groups II and Groups III with the elected claims of Group I. Furthermore, Applicants request the examination of Claim 1 proceed according to MPEP section 803.02.

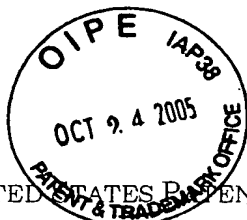
Respectfully submitted,


Brian P. Heaney (Reg. No. 32,542)
Attorney for Applicant(s)


Jennifer Branigan (Reg. No. 40,921)
Agent for Applicant(s)

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza I, Suite 1400
2200 Clarendon Boulevard
Arlington, Virginia 22201
(703) 812-5305
(703) 243-6410 [Facsimile]
Internet Address: jbranigan@mwzb.com

Filed: **October 24, 2005**
jjb:K:\Merck\2264\Petition.doc



UNITED STATES PATENT AND TRADEMARK OFFICE

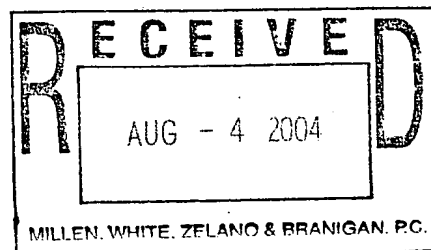
Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

JUL 30 2004

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
2200 CLARENDON BOULEVARD
ARLINGTON, VA 22201

In re Application of
Michael Schmidt et al
Serial No.: 09/877,259
Filed: June 11, 2001

Attorney Docket No.: MERCK2272 ✓



PETITION DECISION

This is in response to the petition under 37 CFR 1.181, filed June 10, 2004 requesting a withdrawal of the Restriction requirement of April 21, 2003.

BACKGROUND

A review of the file history shows that the application was accepted under 35 U.S.C. 111 on June 11, 2001. The application as filed contained claims 1-11. In the first office action mailed February 10, 2003 the examiner set forth a restriction requirement under 35 U.S.C. 121 dividing the claims into 3 groups and requiring an election of species within the first group if elected, as follows:

- Group I, Claims 1-7, drawn to an ionic liquid, classified in class 252, subclass 62.2.
- Group II, Claims 8, 10-11, drawn to an electrochemical cell and an electrolyte composition, classified in class 429, subclass 188.
- Group III, Claim 9, drawn to a capacitor, classified in class 361, subclass 503.

Applicants responded on March 6, 2003, electing Group I, with traverse, and electing a species as required. In the traversal, Applicants argued that the groups were not an intermediate/final product as the examiner had stated but a combination/subcombination that required a two-way distinction.

Upon the election of Group I the application was transferred from Art Unit 1754 to Art Unit 1626 where the ionic liquid structure is examined.

A first action on the merits was sent out on April 21, 2003. In this action, the examiner responded to applicant's traverse by stating that indeed the Groups were not related as intermediate/final products but as products and processes but retained the same three groups. The restriction was not made final at this time.

In a response by Applicants on July 21, 2003 to the first office action, Applicants again stated

Handwritten: Dated 8/5/04

that the groups were not related by a product and process of using but by a combination/subcombination and requested a removal of the restriction.
On December 17, 2003 the action was made final.

DISCUSSION

Upon review of the restriction requirement, it is noted that the three groups represent combination/subcombination relationships as stated by the Applicant. There has been no two-way distinction shown. The subcombination is essential to the combination and there is no evidence that combination is patentable without the details of the subcombination. See MPEP 806.05(c).

In this instance the subcombination which is the ionic liquid constitutes the essential distinguishing feature of the combination as claimed (e.g. capacitor using said ionic liquid or the electrochemical cell using said ionic liquid) and therefore the inventions are not distinct and a requirement for restriction between the combination and subcombinations should not have been made, even though the subcombination has separate utility.

The petition is **GRANTED**.

It is noted that there are many core structures encompassed within Group I. The examiner may reevaluate the propriety of a restriction requirement among said structures.

The application will be forwarded to the examiner for further action.

Should there be any questions about this decision please contact Jean F. Vollano by letter addressed to Director, TC 1600, at the address listed above, or by telephone at 571-272-0648 or by facsimile sent to the general Office facsimile number.



Bruce M. Kisliuk
Director, Technology Center 1600